



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,202	10/28/2003	Kenneth A. Jansen	COMP:0256--1/FLE 20030215	4520
7590 12/15/2004			EXAMINER	
HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, CO 80527-2400			BUI, HUNG S	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/695,202

Applicant(s)

JANSEN, KENNETH A.

Examiner

Hung S. Bui

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/28/2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 9-16 are objected to because of the following informalities: there is no antecedent basis for "the circuit board holder." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wark [US 6,710,614] in view of Farnworth [US 6,233,154].

Regarding claims 1, 5 and 8, Wark discloses a server (figures 2a-b) comprising:

- a circuit board (19) comprising a plurality of electrical connector(s)/socket(s) connected memory chips (17) disposed on a first side of the circuit board;
- a chassis (13, figure 2a-b) having at least one of a front opening;
- a board holder (1) operable to receive the circuit board and provide access to the first electrical connector, wherein the board holder is operable to be pivoted relative to the chassis to enable the circuit board to be disposed within the board holder; and
- a securing member operable to selectively secure pivotal movement of the circuit board relative to the chassis.

Wark discloses the instant claimed invention except for the circuit board having a second electrical connector disposed on a second side of the circuit board opposite the first side of the circuit board.

Farnworth et al. disclose a circuit board (62) having a plurality of electrical components (66) mounted on their socket(s)/connector(s) on both sides of the circuit board (figures 3a-b).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to mount electrical components through connector(s)/socket(s) into another side of the circuit board of Wark, as suggested by Farnworth, for the purpose of saving space or providing greater memory capabilities.

Regarding claims 2-3, Wark further discloses the securing member being operable to secure the circuit board in a vertical position (figure 2a) and release the pivotal board holder to enable the circuit board to be pivoted toward a horizontal position (figure 2a).

Regarding claim 4, Wark discloses the board holder being fully disposed within the chassis during operation (figure 2a).

Regarding claim 6, Wark, as modified, further disclose at least one micro\_processor assembly connectable to the first electrical connector (column 1, lines 30-36).

Regarding claim 7, Wark, as modified, disclose the instant claimed invention except for an input/out device connectable to the second electrical connector.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to add an input/out device to connect to the second electrical connector of the circuit board of Wark, as modified, for the purpose of enabling replacement device.

Regarding claims 9-20, the claimed method steps are inherent in the product structures.

Regarding claims 17-20, Wark discloses a server (figure 3) comprising:

- means (5) for pivoting a circuit board holder relative to a server chassis;
- means (25) for selectively securing/releasing the circuit board holder in a first position to a second position relatively to the server chassis; and
- means (socket to connect a chip 17) for coupling at least one memory component to each of a first side of the circuit board.

Wark discloses the instant claimed invention except for the circuit board having a means for coupling at least one electronic component being mounted on the second side of the circuit board opposite the first side of the circuit board.

Farnworth et al. disclose a circuit board (62) having a plurality of electrical components (66) mounted on their socket(s)/connector(s)/means on both sides of the circuit board (figures 3a-b).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to mount electrical components through socket(s)/means into the second side of the circuit board of Wark, as suggested by Farnworth, for the purpose of saving space or providing greater memory capabilities.


***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/11/04  
HB

  
**KAMAND CUNEO**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**